Index of Claims

| Αp | plica | tion/ | Contr | ol No |  |
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10/829,502

IMAI ET AL.

Applicant(s)/Patent under Reexamination

Examiner

Art Unit

Michael Kornakov

1746

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| E           | Cla         | aim            |                                       |          |          | . [      | Date     | е         |          |                 |          | Cla  | im       |          |          |         | Date            | 3        |          |          | <b></b> | CI   | aim | П               |                     |          | (        | Date     | 9        |          |          | $\neg$   |
|---|-------------|----------------|---------------------------------------|----------|----------|----------|----------|-----------|----------|-----------------|----------|--|----------|----------|----------|---------|-----------------|----------|----------|----------|---------|------|-----|-----------------|---------------------|----------|----------|----------|----------|----------|----------|----------|
| 1           |             | <del>   </del> | ın                                    |          |          |          |          |           |          |                 |          |  | ie.      |          |          |         |                 |          |          |          |         |      |     |                 |                     |          |          |          |          |          |          |          |
| 1           | ㅁ           | ١ڇ             | Ž                                     |          |          |          |          |           |          |                 |          | nal  | ij       |          |          |         |                 |          |          |          |         | la c | ١٣  |                 |                     |          |          |          |          |          |          | -        |
| 1           | iΞ          | Ĭ              | 9.                                    |          |          |          |          |           |          |                 |          | 证  | ,<br>iği |          |          |         | 1               |          |          |          |         | ΙĒ   | ٦   |                 |                     | - 1      |          |          |          |          |          |          |
| 1   |             |                |                                       | <u> </u> |          |          | <u> </u> |           |          |                 | _        |  |          |          | $\perp$  | _       |                 | $\perp$  |          |          |         |      |     |                 | Ш                   |          |          |          |          |          |          |          |
| 3   | <u> </u>    |                |                                       |          |          |          | _        | Ш         |          |                 | _        |  |          | Ш        |          |         | 1               |          | ᆚ        | Ш        |         |      | 101 |                 | Ш                   |          |          |          |          |          |          |          |
| 4   |             |                | _                                     | <u> </u> |          |          |          | _         | L        | $\sqcup$        | _        |  |          | Ш        |          |         |                 | _        |          | _        |         |      |     |                 | Ш                   |          |          |          |          |          |          | ᆜ        |
| 5   |             |                |                                       | <u> </u> | _        |          |          | _         | _        | $\vdash$        | 4        |  | 53       | Ш        | _        |         | ш               | _        | _        | 1        |         |      | 103 |                 |                     | _        |          |          |          |          |          | _        |
| 6   |             |                | _                                     | <u> </u> | Н        |          |          |           |          | $\vdash$        | 4        |  |          | Ш        | _        |         | 4               | _        | -        | 4        |         |      |     | Щ               | $\sqcup$            | _        |          |          |          | _        |          | _        |
| 17  | <u> </u>    |                |                                       | ┡        | H        |          | -        | _         | H        | -               |          |  |          | -        | _        |         | <b>↓</b>        |          | +        | _        |         |      |     | <u> </u>        | Н                   |          |          |          |          |          |          | _        |
| See   10  |             |                | -                                     | <u> </u> | Н        |          | H        | <u> </u>  | -        |                 | ᅱ        |  | 56       | Н        | -        |         | $\vdash$        | -        | $\perp$  | <u> </u> |         | ļ    | 106 | $\vdash$        | $\vdash$            |          |          |          |          | _        |          |          |
| 9   |             |                | -                                     |          | Н        |          | Н        | -         | $\vdash$ | $\vdash$        | 긕        |  |          | $\vdash$ | _        |         | -               |          | +        |          |         |      |     |                 | Н                   | -        |          |          | _        | _        | _        | _        |
| 10  |             |                |                                       | -        | Н        | _        | H        | H         | -        | $\vdash$        | $\dashv$ |  |          | $\vdash$ |          |         | $\vdash$        | +        |          | +        |         |      | 108 | <b>.</b>        | $\vdash$            | ᅱ        |          |          |          | $\dashv$ |          | 4        |
| 111   |             |                |                                       |          | Н        |          | $\vdash$ |           | -        | Н               | ⊣        |  |          | $\vdash$ |          | +       | +               | -        | +        | +-       |         |      | 109 | $\vdash$        | $\vdash$            |          |          |          |          |          | $\dashv$ |          |
| 112   v   | $\vdash$    |                |                                       |          |          | -        | $\vdash$ | H         | -        | $\vdash$        | $\dashv$ | $\vdash$   |          | $\vdash$ | +        | -       | +               | -+       | +        | +        |         |      |     | -               |                     | $\dashv$ | _        |          |          |          | -        | 4        |
| 13  |             |                | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | H        | $\vdash$ | $\vdash$ | $\vdash$ | -         | $\vdash$ | $\vdash \vdash$ | -        |  |          | $\vdash$ | +        | +       | $\vdash$        | $\dashv$ | +        | +        |         |      | 117 | -               | $\vdash$            | -        |          |          | $\vdash$ |          | $\dashv$ | $\dashv$ |
| 14  | <del></del> |                | -                                     | H        | $\vdash$ | -        | Н        | $\vdash$  |          | $\forall$       | -        | $\vdash \vdash$                                  |          | $\vdash$ | +        | +       | +-              | $\dashv$ | $\dashv$ | +        |         |      | 112 | $\vdash$        | $\vdash$            |          |          |          | $\vdash$ | $\dashv$ | $\dashv$ |          |
| 15  |             |                | -                                     | -        | H        | _        |          | $\vdash$  | $\vdash$ | $\vdash$        | ᅱ        | $\vdash$   |          | $\vdash$ | +        | +       | +-              | +        | +        | +        |         |      |     | $\vdash$        | $\vdash$            | -        |          |          | -        | +        |          | _        |
| 16  |             |                |                                       | -        | Н        | _        | $\vdash$ | -         | $\vdash$ | $\vdash$        | $\dashv$ |  | 65       | $\dashv$ | +        | +-      | $\vdash$        | $\dashv$ | +        | +        |         |      | 115 |                 | $\vdash$            | $\dashv$ | -        | $\vdash$ |          | -        | $\dashv$ | $\dashv$ |
| 17   v  | $\vdash$    |                | _                                     | $\vdash$ | $\vdash$ | -        | $\vdash$ | H         |          | $\vdash$        | $\dashv$ | $\vdash \vdash \vdash$                           |          | $\vdash$ | +        | +-      | $\vdash$        | -+       | +        | +        |         |      | 116 | $\vdash$        | $\vdash \vdash$     | $\dashv$ |          |          | $\vdash$ | -        | $\dashv$ | $\dashv$ |
| 18       19       18       19       118       119       119       119       119       119       120       121       121       121       122       122       122       122       122       122       122       122       122       122       122       122       122       122       122       122       122       122       123       124       124       124       124       125       125       125       125       125       125       125       125       125       125       125       125       127       127       127       127       127       127       127       127       128       128       128       128       128       128       128       129 </td <td></td> <td></td> <td></td> <td>_</td> <td><math>\Box</math></td> <td></td> <td></td> <td>Н</td> <td></td> <td></td> <td><math>\dashv</math></td> <td></td> <td></td> <td></td> <td>_</td> <td>+</td> <td><math>\vdash</math></td> <td><math>\dashv</math></td> <td></td> <td>+-</td> <td></td> <td></td> <td>117</td> <td>Н</td> <td><math>\vdash</math></td> <td></td> <td></td> <td></td> <td></td> <td><math>\dashv</math></td> <td><math>\dashv</math></td> <td></td> |             |                |                                       | _        | $\Box$   |          |          | Н         |          |                 | $\dashv$ |  |          |          | _        | +       | $\vdash$        | $\dashv$ |          | +-       |         |      | 117 | Н               | $\vdash$            |          |          |          |          | $\dashv$ | $\dashv$ |          |
| 19  |             |                | Ė                                     |          |          |          | Н        |           | П        | $\dashv$        | $\dashv$ | $\vdash$   |          |          | $\dashv$ |         | 1 1             | +        |          | +        |         |      | 118 | Н               | $\vdash$            | -        |          |          |          | -        | $\dashv$ | $\dashv$ |
| 120   |             |                |                                       |          |          |          | H        | -         | Н        |                 | ┪        | $\vdash$   |          |          | $\dashv$ | +       | 1               |          | $\dashv$ | +        |         |      |     | Н               | $\vdash$            | $\dashv$ | _        |          | -        |          | -        | $\dashv$ |
| 21       1       1       1       121       121       121       122       122       123       123       123       123       123       124       124       124       124       124       124       124       125       125       125       125       125       125       126       127       127       127       127       127       127       127       127       127       128       129       129       129       129       130       130       130       131       131       131       131       131       131       131       131       131       131       131       132       133       134       136       137  |             |                |                                       |          |          |          | Н        |           | Н        |                 |          |  | 70       | _        | $\top$   | +-      | 1-1             | _        | $\top$   | _        |         | -    | 120 | Н               | $\vdash$            | $\dashv$ |          | -        |          | 十        | $\dashv$ | $\dashv$ |
| 22         122         122         123         123         123         123         123         123         123         123         123         124         124         124         124         124         124         125         125         125         125         125         125         125         125         125         125         125         126         126         126         126         127         127         127         127         127         128         128         129  |             |                |                                       |          |          |          |          |           | Н        | $\dashv$        | ٦        |  | 71       |          | +        | $\top$  | $\Box$          | $\dashv$ | $\top$   | _        |         |      |     | Н               | H                   | $\neg$   | _        |          |          | 7        | ┪        | $\neg$   |
| 23         123         123         124         124         124         124         124         124         125         125         125         126         126         126         126         126         126         127         127         127         127         127         127         128         128         128         128         128         129         129         129         129         129         130         130         130         130         131         131         131         131         131         131         131         132         133  |             |                |                                       |          |          |          |          |           | П        |                 | ┪        |  |          | $\dashv$ | +        | $\top$  | T               | 1        | +        | +        |         |      | 122 | Н               | $\vdash$            |          | _        |          |          | $\dashv$ | $\dashv$ | $\dashv$ |
| 24       124       124       124       125       125       126       125       126       125       126       127       127       127       127       127       127       128       128       128       128       128       128       128       129       129       130       131       131       131       131       131       131       131       131       131       131       131       132       133       133       133       133       133       133       133       133       133       133       133       134       134       135       135       136       136       137       137       137       137       137       137       137       137       137       137       137       137       137       139       140       141       141       142       142       143       144       144       144       144       144       144       144       145       145       146       147       147       148       149       149       149       149       149       149       149       149       149       149       149       149       149       149       149       149       149       14   |             |                |                                       |          |          |          |          |           |          |                 | ٦        |  | 73       |          |          | $\top$  |                 | T        | $\top$   |          |         | -    | 123 | Н               | $\vdash$            | $\neg$   |          |          |          | $\dashv$ | $\dashv$ | _        |
| 25         125         126         126         126         126         126         127         127         128         127         128         128         128         128         128         129         129         129         129         130         130         130         130         130         131         131         131         132         133  |             |                |                                       |          |          |          |          |           |          |                 |          |  | 74       |          | $\top$   |         | T               | $\top$   |          | 1-       |         |      | 124 | П               |                     | ┪        | _        |          |          | $\dashv$ | $\neg$   | $\neg$   |
| 26         76         77         126         127         128         128         128         128         128         129         129         129         130         130         131         131         131         131         131         131         131         132         133         133         133         133         133         133         133         134         134         134         134         134         134         134         135         136         136         136         137         138         138         138         138         138         139         140         141         141         142         143         144         144         144         144         145         146         146         147         147         149         14   |             |                |                                       |          |          |          |          |           |          |                 |          |  |          |          |          | 1       |                 | $\neg$   | _        |          |         |      | 125 | Ħ               | П                   |          |          |          |          | $\dashv$ |          | 7        |
| 27         127         128         128         128         128         128         128         128         129         129         129         129         130  |             | 26             |                                       |          |          |          |          |           |          |                 |          |  | 76       |          |          |         |                 |          |          |          |         |      | 126 |                 |                     | 一        |          |          |          | 寸        | _        |          |
| 29       79       129         30       80       130         31       81       131         32       82       132         33       83       133         34       84       134         35       85       135         36       86       136         37       87       137         38       88       138         39       89       139         40       90       140         41       91       141         42       92       142         43       93       143         44       94       144         45       96       146         47       97       147         48       98       148         49       99       149   |             |                |                                       |          |          |          |          |           |          |                 |          |  |          |          |          |         |                 |          |          |          |         |      | 127 | П               |                     |          |          |          |          | T        | 一        | 乛        |
| 30       80       130       131         31       81       131       131         32       82       132       132         33       83       133       133         34       84       134       134         35       85       135       135         36       86       136       136         37       87       137       137         38       88       138       138         39       89       139       140         40       90       140       141         41       91       141       141         42       92       142       142         43       93       143       143         44       94       144       144         45       96       146       146         46       96       146       147         48       98       148       149   |             |                |                                       |          |          |          |          |           |          |                 |          |  |          |          |          |         |                 |          |          |          |         |      | 128 |                 | П                   |          |          |          |          |          | ヿ        |          |
| 31       81       131       132         32       132       133       133         34       134       134       134         35       86       135       135         36       86       136       137         38       88       138       138         39       88       138       139         40       90       140       141         41       91       141       141         42       92       142       142         43       94       144       144         45       95       145       146         46       96       146       146         47       97       147       148         49       99       149       149   |             |                |                                       |          |          |          |          |           |          |                 |          |  |          |          |          |         |                 |          |          |          |         |      | 129 |                 |                     |          |          |          |          |          |          |          |
| 32       82       132       133         33       133       133       134         34       84       134       134         35       85       135       135         36       86       136       137         38       87       137       137         38       88       138       138         39       89       139       139         40       90       140       141         41       91       141       141         42       92       142       142         43       93       143       143         44       94       144       144         45       95       1445       146         46       96       146       147         48       98       148       148         49       99       149       149   |             |                |                                       |          |          |          |          |           |          |                 |          |  |          |          |          |         |                 |          |          |          |         |      | 130 |                 |                     |          |          |          | -        |          |          |          |
| 33       133       134       134       134       134       134       134       134       134       135       135       135       135       135       136       136       136       137       137       137       137       137       137       137       137       138       138       138       138       138       139       139       140       140       140       141       140       141       141       141       141       141       142       142       142       143       143       143       144       14   |             |                |                                       |          |          |          |          |           |          |                 | _        |  |          |          |          |         |                 |          |          |          |         |      | 131 |                 |                     |          |          |          |          |          |          |          |
| 34       35       36       38       35       36       37       38       37       38       39       38       39       38       39 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>_</td><td></td><td></td><td><math>\perp</math></td><td><math>\perp</math></td><td><math>\perp</math></td><td></td><td>_</td><td></td><td>Ш</td><td></td><td></td><td>132</td><td></td><td></td><td><math>\Box</math></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>  |             |                |                                       |          |          |          |          |           |          |                 | _        |  |          | $\perp$  | $\perp$  | $\perp$ |                 | _        |          | Ш        |         |      | 132 |                 |                     | $\Box$   |          |          |          |          |          |          |
| 35       36       37       38       37       38       39       38       39       38       39 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>Ш</td><td></td><td>Ш</td><td></td><td>_</td><td></td><td></td><td><math>\Box</math></td><td><math>\perp</math></td><td></td><td>Ш</td><td></td><td><math>\perp</math></td><td></td><td></td><td></td><td>133</td><td></td><td>Ш</td><td></td><td></td><td></td><td></td><td><math>\Box</math></td><td><math>\Box</math></td><td></td></td<>  |             |                |                                       |          |          |          | Ш        |           | Ш        |                 | _        |  |          | $\Box$   | $\perp$  |         | Ш               |          | $\perp$  |          |         |      | 133 |                 | Ш                   |          |          |          |          | $\Box$   | $\Box$   |          |
| 36       86       136       137       137       137       137       138       138       138       138       138       139       139       139       139       139       139       140       140       140       141       141       141       141       141       141       141       141       142       142       142       142       143       143       143       144       144       144       144       145       145       146       147       147       148       148       148       149   |             |                | $\sqcup$                              |          | $\sqcup$ |          |          | $\square$ | $\sqcup$ | $\sqcup$        | _        | L  |          | $\perp$  | _        | 4       | Ш               | _        |          | $\perp$  |         |      | 134 | Ш               | $\sqcup$            | _        | _        |          |          |          | $\perp$  |          |
| 37       38       88       137       138         39       88       138       139       139         40       90       140       141       141         42       92       142       142       143         43       93       143       143       144         45       95       145       145       146         47       97       147       148       148         49       99       149       149       149  |             |                | _                                     |          | H        |          | <u> </u> |           |          | $\perp$         | 4        |  |          | $\perp$  | $\bot$   | $\bot$  | $\sqcup$        | $\perp$  | $\bot$   | $\perp$  |         |      |     | Ш               | Ц                   | _ļ       | ļ        |          |          |          | _        | Ц        |
| 38       39       88       138       139       139       139       139       139       139       139       140       140       140       140       141       141       141       141       141       141       141       141       142       142       142       142       143       143       143       143       144       144       144       144       144       144       145       145       146       146       147       147       148       148       148       149<   |             |                |                                       | _        | $\sqcup$ |          | $\dashv$ | _         | -        | $\dashv$        | _        | <b> </b>   | 86       | $\dashv$ | $\perp$  | _       | $\sqcup$        | $\perp$  | ֈ.       | $\perp$  |         |      | 136 | Ш               | Ц                   | _        |          |          | _        |          | _        |          |
| 39       89       139         40       90       140         41       91       141         42       92       142         43       93       143         44       94       144         45       95       145         46       96       146         47       97       147         48       98       148         49       99       149   |             | 3/             |                                       | _        |          | _        | $\sqcup$ |           |          | -+              | 4        |  |          | $\perp$  | +        | +       | $\vdash \vdash$ |          | $\perp$  | 4-4      |         |      | 137 | $\sqcup$        | $\sqcup$            | _        | _        |          |          |          | _        |          |
| 40       90       140         41       91       141         42       92       142         43       93       143         44       94       144         45       95       145         46       96       146         47       97       147         48       98       148         49       99       149   |             | 30<br>30       |                                       | _        |          | $\dashv$ | -        |           | $\vdash$ | $\dashv$        | 4        | <del>                                     </del> |          | -        | +        | +       | $\vdash$        |          | +        |          |         |      | 138 | $\vdash \vdash$ | $\dashv$            |          | 4        | 4        | _        | 4        |          | _        |
| 41       91       141         42       92       142         43       93       143         44       94       144         45       95       145         46       96       146         47       97       147         48       98       148         49       99       149   |             |                |                                       | _        |          |          |          |           | $\vdash$ | $\dashv$        | $\dashv$ |  |          | $\dashv$ | +        | +       | ⊢┤              | $\dashv$ | +        | +        |         |      | 139 |                 | $\vdash \downarrow$ | _        |          |          | _        | -        | _        | _        |
| 42       92       142         43       93       143         44       94       144         45       95       145         46       96       146         47       97       147         48       98       148         49       99       149   | $\vdash$    |                |                                       | $\dashv$ | -        |          |          | $\dashv$  | $\vdash$ | -+              | $\dashv$ |  | -        |          | +        | +       | $\vdash \vdash$ | +        | +        | +        |         |      |     | $\vdash$        | $\dashv$            |          |          | 4        |          | -        |          | 4        |
| 43     93       44     94       45     95       46     96       47     97       48     98       49     99   | $\vdash$    | 42             | $\dashv$                              | $\dashv$ |          | $\dashv$ |          |           | $\dashv$ | +               | -        | -  |          | $\dashv$ | +        | +-      | $\vdash$        | +        | +        | +        |         |      | 141 |                 | $\vdash \vdash$     | -        |          |          | _        | 4        |          | $\dashv$ |
| 44     94       45     95       46     96       47     97       48     98       49     99   | $\vdash$    |                | -                                     | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ |           | $\vdash$ | +               | $\dashv$ |  |          | $\dashv$ | +        | +       | ╁               | +        | +        | +        |         |      |     | $\vdash \vdash$ | $\dashv$            | $\dashv$ |          | -        | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ |
| 45     95       46     96       47     97       48     98       49     99   |             |                | 1                                     |          | -        |          | $\dashv$ | $\dashv$  |          | -               | $\dashv$ |  |          | $\dashv$ | +        | +       | $\vdash$        | +        | +        | +        |         |      | 143 | $\vdash$        | -                   | $\dashv$ | -        | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ |
| 46     96       47     97       48     98       49     148  |             |                | $\dashv$                              | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | ᅱ         | $\vdash$ | +               | $\dashv$ |  | 94       | $\dashv$ | +        | +-      | H               | +        | +        | +        |         |      | 144 | $\vdash$        | $\dashv$            |          | -        | $\dashv$ | -        | $\dashv$ | $\dashv$ | $\dashv$ |
| 47  | -           |                | $\dashv$                              | ᅱ        | $\dashv$ | ᅱ        | -        | $\dashv$  | $\dashv$ | +               | $\dashv$ |  |          | $\dashv$ | +        | +-      | $\vdash$        | +        | +        | +        |         |      | 146 | $\dashv$        | $\vdash$            | -        | $\dashv$ | $\dashv$ | $\dashv$ | -+       | +        | $\dashv$ |
| 48  | -           |                | $\dashv$                              | $\dashv$ | $\dashv$ |          | $\dashv$ | $\dashv$  | $\dashv$ | $\dashv$        | -        |  |          | $\dashv$ | +        | +-      | $\vdash$        | +        | +        | +        |         |      | 147 |                 | +                   | -        | $\dashv$ |          | $\dashv$ | -+       | $\dashv$ | $\dashv$ |
| 49 99 149 149   |             |                |                                       | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$  | $\dashv$ | $\dashv$        | $\dashv$ |  |          | $\dashv$ | +        | +       | $\vdash$        | $\dashv$ | +        | +        |         |      | 148 | $\dashv$        | $\dashv$            | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ |
|   |             |                | $\dashv$                              | $\dashv$ | -        | $\dashv$ | $\dashv$ | $\dashv$  | $\dashv$ | _               | $\dashv$ | -  |          | $\dashv$ | +        | +-      | $\vdash$        | $\dashv$ | +        | +        |         |      |     | -               | -+                  | -+       | $\dashv$ | -        | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ |
|   |             | 50             | $\neg$                                | 7        | 寸        | T        | 1        | 1         | 寸        | $\dashv$        | $\dashv$ |  | 100      | $\dashv$ | +        | +       | $\vdash$        | $\dashv$ | +        | +        |         |      | 150 |                 | $\dashv$            | $\dashv$ | -1       | $\dashv$ |          | +        | $\dashv$ | $\dashv$ |